Solar Permitting and Inspection Checklist: Tewksbury

The Town of Tewksbury encourages the safe and efficient installation of photovoltaic systems with its permitting and inspection system. This checklist is intended to help building owners and installers understand the process.

This Checklist describes the permitting process for small-to-medium sized systems (up to 250 kW), whether roof-mounted or ground-mounted. The Tewksbury Building Department oversees this work and can be reached at 978-640-4430.

Large ground-mounted systems (250 kW or more) require special permits and have a totally separate process. Contact the Community Development Department at 978-640-4370 for details on special permits. Requirements are specified in the Town's zoning bylaws at section 6600.

Tewksbury Requires Two Permits for Residential and Commercial Installations

- Building Permit: ensures that the building can support the panels and that they are installed per the manufacturer's instructions.
- Electrical Permit: ensures that all wiring is safe and complies with the state electrical code.

It's the Installer's Job

Typically, the company hired to install the solar system does ALL of the permit work. The building owner should confirm with the installer that he or she secures the necessary permits but should otherwise leave the details to the installer. The installer will typically pay the permit fees and include their costs in the final bill to the customer.

Completed applications are typically processed in five to 10 business days.

Permit-Process Details

- 1. The installer completes the building permit application describing the location and the system to be installed. The permit applications may be picked up at the Town Office or downloaded from the Town's website:
 - Residential applications (one or two-family homes) are at http://www.tewksbury-ma.gov/sites/tewksbury-ma/files/u216/new_building_permit_application1.pdf
 - All other buildings require a commercial permit: http://www.tewksburyma.gov/sites/tewksburyma/files/u216/comm_building_permit_application.pdf

These forms haven't been updated to include the requirements for solar energy systems, so the following checklists are important. The completed applications must also include:

- Completed building permit application
- Copy of the Contractor Supervisor License and the Home Improvement Contractor registration or the homeowner's signed affidavit
- Workers' Compensation Affidavit and general liability insurance
- Copy of signed contract, including the estimated price of the installation

- Evidence that the roof is structurally capable of supporting the system; generally this requires an engineer's stamped affidavit
- 2 sets of building plans
- Certified plot plan if the permit is for a ground-mounted system
- The permit fee
- 2. A licensed electrician completes the electrical permit application and usually submits it to the Building Department at the same time as the building permit application. The electrical permit application is available at: http://www.tewksbury-ma.gov/sites/tewksbury-ma/files/file/elec.pdf

The application requires the electrician to submit:

- License number
- Certificate of insurance
- Detailed description of the installation
- The permit fee
- 3. Tewksbury allows email submittals provided all attachments are legible. Otherwise, forms and documentation may be mailed or hand-delivered.
- 4. Staff Review: The Buildings Department staff will phone the applicant if any additional information is needed. Once the application is complete, staff members review the substance of the project. They ensure that no taxes are due on the property and, if necessary, circulate it among other departments. For example, staff will ask the conservation agent to ensure that ground-mounted systems don't get installed in protected wetlands.
- 5. When the review is complete, staff will notify the applicant by mail, email, or phone. The review is usually completed within five to 10 business days.
- 6. When permits are issued, the installer may complete the project.

Inspection Process Details

- 1. Tewksbury requires installations to pass a building inspection first and then an electrical inspection.
- When the solar installation is complete, the installer submits an engineer's final affidavit certifying that the work was completed as specified. Often the installer submits photographs with the affidavit.
- 3. The installer phones the Building Inspector and requests an inspection. The Building Inspector will arrange an appointment with the installer for the same day or the next and for sometime between 9:30 am and noon. For residential installations, the homeowner must be present. For commercial projects, the contractor must be present. The Building Inspector may waive an on-site inspection if the photographs demonstrate that the job was done properly.

- 4. After the building inspection is complete, the installer schedules an electrical inspection. The project's electrician must be present for that review but the homeowner does not.
- 5. Finally, the utility needs to interconnect the solar system to the grid. That step is not overseen by the town.

Utility Interconnection: Know Before You Buy

Unless you are living "off the grid," your panels won't be useful until National Grid connects them to both your building and its distribution network. This "interconnection" process can create delays and frustration because National Grid has to install a new meter on your building and may have other priorities or technical problems adding new distributed energy resources to a particular circuit. The solar installer should manage the interconnection process for the building owner. The owner should understand the steps and be certain, before investing in the project, that National Grid will permit the interconnection in a timely manner.

Fees

- Tewksbury's building permit fees are based on the cost of the project: \$10 per \$1,000 valuation of the project.
- The electrical permit is a flat \$50 for a residential project and \$200 for a commercial project.